Claims

1. (Currently amended) A method, ~~for classifying an unknown bioactive condition,~~ comprising:

generating a ~~scenario~~ scenario-to-be-classified by exposing a first biological system to two or more bioactive conditions, including [[the]] an unknown bioactive condition;

representing a response of the first biological system, or portion thereof, to the bioactive conditions~~, where representing the response of the system comprises determining data sufficient to generate~~ by generating a feature space vector;

using a database, the database comprising scenarios where each scenario was generated by exposing a second biological system to one or more bioactive conditions, the scenario being represented as feature space vector data;

determining software expert parameters, where the expert encodes a function that maps a feature space vector to a scenario;

weighting the expert parameters;

~~attempting to classify~~ classifying a scenario by database comparison using the software expert; and

outputting a classification result to a user.

2. (Original) The method according to claim 1 where the system comprises living cells.

Claims 3-8 (Canceled).

9. (Currently amended) The method according to claim [[7]] 1 where transforming the data comprises:

determining expert parameters based on extracted data, where experts encode functions that map the feature space vector to a set of scenarios; and

tuning the integrated expert.

10. (Previously presented) The method according to claim 9 where tuning the integrated expert comprises adaptive expert calibration.

DO NOT ENTER